

The listing of claims are the original claims in this application:

Listing of Claims:

1. (original) A method for automatic soil sampling and analysis, comprising:

- a) moving a robot platform over the soil;
- b) taking a soil sample using a soil probe on the robot platform;
- c) analyzing the soil sample in a lab on the robot platform;
- d) generating data from the soil analysis; and
- e) transmitting the data to a remote site.

2. (original) The method of claim 1 further comprising controlling movement of the robot platform with a global positioning system or other location systems or a combination of several location systems.

3. (original) The method of claim 1 wherein steps a-e are performed automatically without human intervention.

4. (original) The method of claim 1 wherein steps a-e are performed autonomously.

5. (original) A robot for sampling and analyzing soil, comprising:

- a ground drive system for moving the robot over the ground;
- a control unit for controlling the ground drive system;
- a probe for taking a soil sample;
- a lab for analyzing the soil sample;

a processor for generating data from the soil analysis; and
a transmitter for transmitting the data to a remote site.

6. (original) The robot of claim 5 wherein the control unit includes a global positioning system.

7. (original) The robot of claim 5 wherein the robot is unmanned.

8. (original) The robot of claim 5 wherein the control unit steers the robot.

9. (original) The robot of claim 5 further comprising a conveyor for conveying the soil sample to the lab.

10. (original) The robot of claim 5 wherein the processor is operatively connected to the ground drive system to activate and deactivate the ground drive system.

11. (original) The robot of claim 5 wherein the processor is operatively connected to the control unit for automatic movement of the robot.

12. (original) The robot of claim 5 wherein the processor is operatively connected to the lab for automatic analysis of the soil sample.

13. (original) The robot of claim 5 wherein the processor is operatively connected to the transmitter for automatic transmission of the data.

14. (original) The robot of claim 5 wherein the transmitter uses radio frequency or cell phone technology to transfer the data.